

## IN THE CLAIMS

1 – 33 (Cancelled).

34. (Currently amended) An apparatus for treating gas with at least one agent, and then heating the gas to a predetermined temperature if desired, the gas being received into the apparatus from a gas source, the apparatus comprising:

- a) a housing having an inlet and an outlet;
- i. b) a single chamber within said housing having an entry port and an exit port, the entry port for connection to a gas source to receive therefrom a gas stream; and the exit port for removal of the gas stream carrying an the admixed agent from the housing; and,
- c) said chamber receiving a quantity of a pharmacologic agent to be admixed with and carried by the gas stream., said chamber receiving the exit port for removal of the gas stream carrying the admixed agent from the housing.

35. (Previously presented) The apparatus defined in claim 34, and further comprising a container ~~for~~ containing a quantity of an agent, the container in fluid communication with the chamber.

36. (Withdrawn) The apparatus defined in claim 35, wherein the container comprises an opening that releases the agent into the chamber.

37. (Withdrawn) The apparatus defined in claim 35, wherein the container is pre-filled with a quantity of an agent.

38. (Previously presented) The apparatus defined in claim 35, wherein the container comprises a port to receive a quantity of an agent.

39. (Previously presented) The apparatus defined in claim 34, and further comprising at least one layer of an absorbent material positioned inside the chamber to retain a quantity of an agent.

40. (Withdrawn) The apparatus defined in claim 35, wherein the container further comprises a bag member suitable for containing a quantity of an agent and having an opening that is sized so as to permit release of a quantity of agent from the bag member into the chamber for treating the gas with the agent.

41. (Withdrawn) The apparatus defined in claim 40, wherein the container comprises a bag member positioned inside the chamber suitable for containing a quantity of an agent, the bag member being formed of a semi-permeable material so that the gas stream flowing through the chamber is treated with the agent contained within the bag.

42. (Withdrawn) The apparatus defined in claim 34, and further comprising:

- a) at least one bag member in the single chamber having an opening that is sized so as to permit release of a quantity of agent therefrom;
- b) at least one layer of absorbent material in the single chamber, and
- c) a tube member having first and second ends, the first end being coupled to the opening of the bag member and the second end being positioned proximate to the at least one layer so as to deliver the agent onto the layer.

43. (Withdrawn) The apparatus defined in claim 40, wherein the bag member is disposed inside the chamber or outside the chamber.

44. (Withdrawn) The apparatus defined in claim 35, wherein the container comprises an elongated tube member extending inside the chamber and having a proximal and a distal end, a restrictive opening being provided in the elongated tube member to release one or more agents into the chamber when the elongated tube member is filled with a quantity of an agent.

45. (Withdrawn) The apparatus defined in claim 35, and further comprising a pressurizer for pressurizing the agent inside the container, wherein the container comprises a valve for releasing the quantity of agent into the chamber in response to pressure inside the container.

46. (Withdrawn) The apparatus defined in claim 45, wherein the container is positioned inside or outside the chamber.

47. (Withdrawn) The apparatus defined in claim 35, wherein the container comprises an inkjet printhead having at least one nozzle coupled to an opening on the housing for releasing vapor bubbles of at least one agent into the chamber through the opening when energized by control signals.

48. (Withdrawn) The apparatus defined in claim 47, and further comprising:

a) at least one reservoir associated with the inkjet printhead for containing a volume of one or more agents; and

b) a controller coupled to the inkjet printhead and supplying control signals to the inkjet printhead to control the release of one or more agents from the inkjet printhead into the chamber.

49. (Currently amended) The apparatus defined in claim 34, and further comprising:  
~~an access tubing connecting said backup or reserve supply container to a charging port that is attached to a lateral extension of said housing.~~

- a. a back-up or reserve supply container; and,
- b. an access tubing connecting said back-up or reserve container to a charging port that is attached to a lateral extension of said housing.

50. (Previously presented) The apparatus defined in claim 49, wherein the backup or reserve supply container hangs free of the apparatus.

51. (Previously presented) The apparatus defined in claim 49, wherein the backup or reserve supply container is attached to a portion of the apparatus.

52. (Previously presented) The apparatus defined in claim 34, and further comprising humidity sensing means positioned in the chamber in the flow path of the gas stream.

53. (Previously presented) The apparatus defined in claim 52, and further comprising heating means disposed within the chamber for heating the gas.

54. (Previously presented) The apparatus defined in claim 53, and further comprising:

- a) temperature sensing means disposed within the chamber for sensing the temperature of the gas in the chamber; and
- b) control means connected to the temperature sensing means and to the heating means and responsive to the temperature sensing means to control electrical power to the

heating means so as to regulate the amount of heat applied by the heating means to the gas within the chamber.

55. (Currently Amended) An apparatus for treating gas with a humidifying solution and at least one agent, and then heating the gas to a predetermined temperature if desired, the gas being received into the apparatus from a gas source, the apparatus comprising:

- a) a housing having an inlet and an outlet;
- b) a single chamber within said housing having an entry port communicating with the inlet of the housing and an exit port communicating with the outlet of the housing, the entry port for connection to a gas source to receive therefrom a gas stream, and the exit port for a removal of the gas stream from the housing after being add mixed with a humidifying solution and at least one agent;
- c) ~~said chamber receiving a quantity of the a humidifying solution ad mixed with and carried by the gas stream in said single chamber;~~ and
- d. ~~a quantity of the at least one agent to be ad mixed with and carried by the gas stream in said single chamber.; and the exit port for removal of the gas stream carrying the admixed humidifying solution and the at least one agent or agents from the housing;~~
- ee) a backup or reserve supply container for the at least liquid agent and/or humidifying solution in fluid communication with said chamber.

56. (Previously presented) The apparatus defined in claim 55, and further comprising at least one container for containing a quantity of a humidifying solution and a quantity of an agent, the at least one container in fluid communication with the single chamber.

57. (Withdrawn) The apparatus defined in claim 56, wherein the at least one container comprises an opening that releases the humidifying solution and/or the agent into the chamber.

58. (Withdrawn) The apparatus defined in claim 56, wherein the at least one container is pre-filled with a quantity of a humidifying solution and/or an agent.

59. (Previously presented) The apparatus defined in claim 56, wherein the at least one container comprises a port to receive a quantity of a humidifying solution or an agent.

60. (Previously presented) The apparatus defined in claim 55, and further comprising at least one layer of an absorbent material positioned inside the chamber to retain a quantity of an agent.

61. (Withdrawn) The apparatus defined in claim 56, wherein the at least one container comprises separate bag members, one suitable for containing a quantity of humidifying solution, and at least one suitable for containing a quantity of an agent, each having an opening that is sized so as to permit release of a quantity of humidifying solution or agent from the bag member into the chamber for treating the gas.

62. (Withdrawn) The apparatus defined in claim 56, wherein a bag member is positioned inside the chamber and is formed of a semi-permeable material so that the gas stream flowing through the chamber is treated with the humidifying solution or agent contained within the bag.

63. (Withdrawn) The apparatus defined in claim 61, wherein the separate bag members are positioned outside of the chamber.

64. (Withdrawn new) The apparatus defined in claim 63, and further comprising at least one tube member having first and second ends, the first end being coupled to the opening of one of the bag members and the second end being coupled to an opening on the housing that releases the contents of the bag member into one of the plurality of separate chambers inside the housing.

65. (Withdrawn) The apparatus defined in claim 56, wherein the at least one container comprises separate elongated tube members extending inside the chamber and having a proximal and a distal end, a restrictive opening being provided in each elongated tube member to release humidifying solution or agent into the chamber, one elongated tube member being filled with a quantity of humidifying solution and at least one additional elongated tube member being filled with an agent.

66. (Withdrawn) The apparatus defined in claim 56, and further comprising a pressurizer for pressurizing the agent inside the container, wherein the at least one container comprises a valve for releasing a quantity of humidifying solution and at least one agent into the chamber in response to pressure inside the container.

67. (Withdrawn) The apparatus defined in claim 66, wherein the elongated tube member is positioned outside the chamber.

68. (Withdrawn) The apparatus defined in claim 56, wherein the at least one container comprises an inkjet printhead having at least one nozzle positioned proximate to at least one

opening of the housing for releasing vapor bubbles of humidifying solution and at least one agent into the chamber through the opening when energized by control signals.

69. (Withdrawn) The apparatus defined in claim 68, and further comprising:

- a) at least one reservoir associated with the inkjet printhead for containing a volume of humidifying solution or one or more agents; and
- b) a controller coupled to the inkjet printhead and supplying control signals to the inkjet printhead to control the release of humidifying solution and one or more agents from the inkjet printhead into the chamber.

70. (Previously presented) The apparatus defined in claim 55, and further comprising an access tubing connecting the backup or reserve supply container to a charging port that is attached to a lateral extension of said housing.

71. (Previously presented) The apparatus defined in claim 55, wherein the backup or reserve supply container hangs free of the apparatus.

72. (Previously presented) The apparatus defined in claim 55, wherein the backup or reserve supply container is attached to a portion of the apparatus.

73. (Previously presented) The apparatus defined in claim 72, and further comprising humidity sensing means positioned in the chamber in the flow path of the gas stream.

74. (Previously presented) The apparatus defined in claim 73, and further comprising heating means disposed within the chamber for heating the gas.



75. (Previously presented) The apparatus defined in claim 74, and further comprising:

a) temperature sensing means disposed within the chamber for sensing the temperature of the gas in the chamber; and

b) control means connected to the temperature sensing means and to the heating means and responsive to the temperature sensing means to control electrical power to the heating means so as to regulate the amount of heat applied by the heating means to the gas within the chamber.

76. (Withdrawn) An apparatus for treating gas with a humidifying solution and at least one agent, and then heating the gas to a predetermined temperature if desired, the gas being received into the apparatus from a gas source, the apparatus comprising:

a) a housing having an inlet and an outlet:

b) a plurality of separate chambers within said housing, each separate chamber having an entry and exit port through which the gas stream flows, and a separate port to receive a quantity of an agent to be admixed with the gas stream, the entry port of at least one of the separate chambers connected to a gas source to receive therefrom a gas stream and the exit port of another separate chamber for removal of the gas stream carrying one or more admixed agents from the housing.

77. (Withdrawn) The apparatus defined in claim 76, and further comprising at least one container for containing a quantity of an agent, the at least one container in fluid communication with at least one of the plurality of separate chambers within the housing.

78. (Withdrawn) The apparatus defined in claim 77, wherein the at least one container comprises an opening in each of the separate chambers that releases an agent into each chamber.

79. (Withdrawn) The apparatus defined in claim 77, wherein the at least one container is pre-filled with a quantity of an agent.

80. (Withdrawn) The apparatus defined in claim 77, wherein the at least one container comprises a port associated with each of the separate chambers to receive a quantity of an agent.

81. (Withdrawn) The apparatus defined in claim 76, and further comprising at least one layer of an absorbent material positioned inside each separate chamber to retain a quantity of an agent.

82. (Withdrawn) The apparatus defined in claim 77, wherein the container comprises a bag member suitable for containing a quantity of an agent and having an opening that is sized so as to permit release of a quantity of agent from the bag member into each of the separate chambers for treating the gas with the agent.

83. (Withdrawn) The apparatus defined in claim 82, wherein a bag member is positioned inside each of the separate chambers and is formed of a semi-permeable material so that the gas stream flowing through each chamber is treated with the agent contained within the bag.

84. (Withdrawn) The apparatus defined in claim 82, wherein at least one bag member is positioned outside the plurality of chambers.

85. (Withdrawn) The apparatus defined in claim 83, and further comprising at least one tube member having first and second ends, the first end being coupled to the opening of one

of the bag members and the second end being coupled to an opening on the housing that releases the agent into one of the separate chambers.

86. (Withdrawn) The apparatus defined in claim 77, wherein the at least one container comprises an elongated tube member extending inside each chamber and having a proximal and a distal end, a restrictive opening being provided in each elongated tube member to release one or more agents into each chamber when the elongated tube member is filled with a quantity of an agent.

87. (Withdrawn) The apparatus defined in claim 77, and further comprising a pressurizer for pressurizing the agent inside the at least one container, wherein the at least one container comprises a valve for releasing a quantity of agent into each chamber in response to pressure inside the at least one container.

88. (Withdrawn) The apparatus defined in claim 86, wherein the at least one elongated tube member is positioned outside the plurality of separate chambers.

89. (Withdrawn) The apparatus defined in claim 77, wherein the at least one container comprises an inkjet printhead having at least one nozzle positioned proximate to at least one opening of the housing for releasing vapor bubbles of at least one agent into the chamber through the opening when energized by control signals.

90. (Withdrawn) The apparatus defined in claim 89, and further comprising:

- a) at least one reservoir associated with the inkjet printhead for containing a volume of one or more agents; and
- b) a controller coupled to the inkjet printhead and supplying control signals to the inkjet printhead to control the release of one or more agents from the inkjet printhead into a separate chamber.

91. (Withdrawn) The apparatus defined in claim 76, and further comprising an access tubing connecting said backup or reserve supply container to a charging port that is attached to a lateral extension of said housing.

92. (Withdrawn) The apparatus defined in claim 91, wherein said backup or reserve supply container hangs free of the apparatus.

93. (Withdrawn) The apparatus defined in claim 91, wherein said backup or reserve supply container is attached to a portion of the apparatus.

94. (Withdrawn) The apparatus defined in claim 76, and further comprising humidity sensing means positioned in the chamber in the flow path of the gas stream.

95. (Withdrawn) The apparatus defined in claim 94, and further comprising heating means disposed within the chamber for heating the gas.

96. (Withdrawn) The apparatus defined in claim 95, and further comprising:

- a) temperature sensing means disposed within the chamber for sensing the temperature of the gas in the chamber; and
- b) control means connected to the temperature sensing means and to the heating means and responsive to the temperature sensing means to control electrical power to the heating means so as to regulate the amount of heat applied by the heating means to the gas within the chamber.

97. (Currently amended) An apparatus for treating carbon dioxide gas with at least one pharmacologic agent, and then heating the gas to a predetermined temperature if desired, the gas being received into the apparatus from a gas source, the apparatus comprising:

- a) a housing having an inlet and an outlet;
- i b) at least a single chamber within said housing having an entry port and an exit port, the entry port for connection to a gas source of carbon dioxide gas to receive therefrom a gas stream; said chamber receiving a quantity of a pharmacologic agent to be admixed with and carried by the gas stream, the exit port for removal of the gas stream carrying the admixed agent from the housing.

98. (Currently amended) The apparatus defined in claim 97, and further comprising a container ~~for~~ containing a quantity of the pharmacologic agent, the container in fluid communication with the chamber.

99. (Currently amended) The apparatus defined in claim ~~96-97~~, wherein said at least one chamber is a single chamber within said housing having an entry port communicating with the inlet of the housing, and an exit port communicating with the outlet of the housing, the entry port for connection to a gas source to receive therefrom a gas stream; said chamber receiving a quantity of humidifying solution and a quantity of the at least one pharmacologic agent to be admixed with and carried by the gas stream; and the exit port for removal of the gas stream carrying the admixed humidifying solution and agent or agents from the housing; and a backup or reserve supply container for said least one pharmacologic agent and/or humidifying solution in fluid communication with said chamber.

100 (Withdrawn) The apparatus defined in claim 96, wherein said at least one chamber comprises:

a) a plurality of separate chambers within said housing, each separate chamber having an entry and an exit port through which the gas stream flows, and a separate port to receive a quantity of an agent to be admixed with the gas stream, and the exit port of another of said plurality of separate chambers carrying one or more admixed agents from the housing.